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Submitted to BPA via Techforum@bpa.gov

Subject: Comments of EWEB on BPA's Environmental Redispatch Business Practice, Version 1

EWEB Supports BPA's Environmental Redispatch Business Practice

EWEB appreciates BPA's resolve in involving its customers with the goal of making sure the new proposed BPA Business Practice (BP) for Environmental Redispatch (ER) is fair, just and non-discriminatory. Given the enormous philosophical gaps between those supporting, and those opposed to ER, it's easier said than done. While EWEB would prefer we come to consensus on an ER BP based on a Final Rod, we understand the reason for the timing of the current draft discussions before the ROD is finalized. EWEB also appreciates BPA listening to customer concerns and running way past the scheduled stop time for the last ER conference call.

EWEB believes ER is an essential tool for BPA to implement in order to guarantee BPA's compliance with the Clean Water Act (CWA), the Endangered Species Act (ESA) and its intrinsic obligations, as well as BPA's obligations under the Pacific Northwest Electric Power Planning and Conservation Act (NWPA). BPA is required by statutes to protect its preference customers from excessive costs, as well as to assist with integrating new renewable resources into their Balancing Authority. EWEB presents these comments in the hope that final ER BP protocols are fair and just and non-discriminatory for all parties. Like the recent flurry of ER discussions, and lack of clarity in some key areas, these comments are prepared with little preparatory time. Our hope is to ask what we trust are relevant questions to assist BPA and others with their thinking on these matters. Our comments are not intended to state precise actions BPA would or should take, unless warranted.

There are those who state on record that BPA is obligated to sell as negative prices, and consider those costs to be comingled with the already staggering burdensome cost of Fish and Wildlife costs that make up about 1/3 of BPA's Power Rates. Section 839b(h)(1)(A) of the NWPP reads as follows:

839b(h)(1)(A). The Council shall promptly develop and adopt, pursuant to this subsection, a program to protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat, on the Columbia River and its tributaries. Because of the unique history, problems, and opportunities presented by the development and operation of hydroelectric facilities on the

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Columbia River and its tributaries, the program, to the greatest extent possible, shall be designed to deal with that river and its tributaries as a system. [Northwest Power Act, §4(h)(1)(A), 94 Stat. 2708.]

Currently, wind developers suggest that State RPS standards have contributed to the problem, and seemingly don't invite open discussion or potential solutions. Wind resources located in BPA's BA have as their primary purpose the fulfillment of adherence to State RPS standards through the production of Renewable Energy Credits.

With the green attributes stripped away, the wind energy is left to be traded in hourly markets in the Northwest. Over-generation due to new resources for RPS requirements and not for current loads has created a distorted market where those resources 'not' designed to meet or follow load, have zero marginal cost and are looking for the REC and PTC payments that are tied to physical hourly production. The result is an open market with buyers and sellers unable to compete on equal footing. The assumption that resulting market inefficiencies are only due to environmental compliance limitations, (to be covered by BPA ratepayers), is simplistic and pits BPA's ratepayers against renewable, for-profit, developers. It is EWEBs opinion that the impacts of negative pricing should be shared equitably while also providing opportunity to manage and reduce them through incremental grid investments.

EWEB is willing to do its part and assist with re-dispatching and spilling to the extent possible. EWEB is already taking rational economic measures, including spilling hydro and redispatching thermal plants and is evaluating additional opportunities to further reduce generation during over-supply conditions.

EWEB currently coordinates with the industrial cogeneration facility to minimize generation when doing so makes smart economic sense. This results in the plant being reduced to its minimum feasible operating level *prior* to prices reaching negative levels. These reductions are done on both a pre-schedule and real-time in response to market price signals.

Beyond the existing reductions in generation, there are a number of difficulties associated with reducing generation further. Generation is driven by the creation of steam for production runs not associated with the generator and the facility has very little capability to change production processes.

There are other opportunities to reduce hydro generation that will take time to explore and develop into new procedures. Evaluating the potential of these measures requires careful consideration of labor, safety, environmental, and compliance issues. EWEB's hope is that all generators in BPA's BA work together in the same spirit to equally share in the solution.

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Minimum Generation Levels

(#s 2 and #3 – note hydro is not in this section but was mentioned on the last ER call)

The current BPA ER BP asks for minimum generation levels by April 8. Meeting this deadline as well as proving rolling 3-month minimum estimates does not propose a problem with EWEB in regard to thermal generators, or for run of river plants at our lower McKenzie Projects.

Providing BPA minimum loading levels for LLH hydro at our Carmen Project is very difficult. EWEB has strict FERC daily and weekly river elevation and flow limits, with the most restrictive limits occurring between mid-April and early September. Not only do elevation restrictions exist, but spill at Carmen is allowed under explicit fish and wildlife directives. Carmen generation is shaped to the highest value hours, so the only time EWEB expects to see LLH generation would be if there was not enough HLH capacity with both units due to high flows, or when a unit is off for maintenance and there is only one unit to generate energy. EWEB could provide our best guess of a rolling 3-month minimum generation level, and to be honest that might look like zero MW on paper, but in real time it could have moved to higher levels due to changing operating conditions.

In recent spring periods, EWEB has implemented a formal spill regime at our own hydro projects when prices approach zero dollars. EWEB has also successfully balanced LLH and HLH thermal dispatch when units are desire during HLH and are at minimums LLH just to support HLH required generation. In previous years EWEB has a steady record of reducing internal thermal generation down to minimums during LLH and ramped these units up during HLH if that was an economical solution. Looking back at June 2010, one unit was off for nearly the entire month.

Location of Non-Federal Thermal Generators Below the John Day Cut Plane

(Allocation of Environmental Redispatch Quantity sections 1-3)

EWEB was a requested participant in BPA's Redispatch Pilot Program a few years ago. EWEB's Carmen Plant was used as an INC resource to offset a reduced DEC North of John Day, thus reducing N-S congestion. Both International Paper and Seneca Sustainable Energy are similarly located in BPA's BA. At first blush it seems reducing generation at these two plants would reduce the ability to move energy N-S at a time when BPA is looking for just such transmission transfers to move the energy out of the region. If BPA agrees, it would appear BPA would exempt these resources from the ER BP. If not removed from the ER BP, it would be imperative that BPAT review what effect dropping Carmen hydro, or EWEB's two thermal plants, would have on flows North of Alston.

EWEB also requests that generators providing AGC for LSE's or other customers should be excluded from the list of options. EWEB uses Carmen for just such a purpose. If BPA were to replace our AGC hydro with a fixed interchange schedule EWEB would be exposed to unnecessary Energy Imbalance charges from BPA TBL.

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Current ER BP Designed for Scheduled and Tagged Resources
(Generators Subject to Environmental Redispatch)

The proposed BP contains enough detail and clarity around scheduled and tagged resources that it would have a good chance of operational success. However, BPA has not clearly defined how BPA will implement this BP with small plants who do not tag and schedule their generation, who do not have 24x7 operators on site, and who do not themselves enter values into BPA's Customer Data Entry web portal.

EWEB wants to extend support to those co-generation facilities who expressed concern with regard to the interplay between generation and load at specific facilities. BPA should address each of these and make sure they aren't defeating the entire purpose of the BP by creating a simultaneous reduction in load concurrent with reduction in generation. In EWEB's case those behind the meter generators could be put to minimum, or could be removed from the grid, without affecting loads in BPA's footprint.

Operating Reserves
(Has yet to be addressed in current ER BP)

In the ER BP BPA refers to Operating Reserves (OR) just one time, and that is in reference to those plants who are using thermals to provide operating reserves. For Wind E-Tags that are kept whole and replaced with free BPA hydro, both wind and hydro carry a 5% OR requirement so there is no issue here. But it seems that for a customer metered non-federal thermal that is to be replaced by free BPA hydro, the thermal carried a 7% obligation, and the new hydro would carry a 5% obligation, so BPA would need to ensure that both the set aside amount for the hour and the billing determinants for the customer were such that the customer's bill was correct. I only see this as a possibility of setting aside 'too much' and not too little OR, so this does not appear to be a reliability concern, but rather a billing concern.

CDE / Metered Generation Replaced with New BPA Interchange Schedule
(Has yet to be addressed in current ER BP)

In order for it to work within CDE, the customer would need to amend CDE and reduce the expected output to match minimum generation during the hour, and then BPA, since this was a metered resource, would need to create a new interchange schedule and tag showing a replacement schedule to the customer. In our case EWEB uses AGC at our Carmen hydro facility to load follow during the hour. Interchange would need to be changed in order for EWEB to manage its net scheduled interchange with BPA.

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Proposal to limit applicability of ER for the first ER season
(Generators Subject to Environmental Redispatch)

For this first season of ER, BPA should consider limiting the applicability of ER to tagged resources. This would allow BPA system operators to focus on resources that have a large impact on the system. This approach would let BPA refine its ER protocols with generators who submit tags, work out the after the fact issues with ER, and then revise the Business Practice to include small, untagged resources with the experience gained during the first season.

EWEB Non-Federal Thermals Have Renewable Energy Credits (RECs)
(Has yet to be addressed in current ER BP)

Notwithstanding BPA's removal of EWEB plants due to flow, cut plane, AGC issues, EWEB asks that BPA take into account that both thermal plants behind our meter like wind, produce RECs. EWEB asks that BPA consider this when designing the redispatch order protocol. EWEB asks that BPA not lump our two plants, or other customer's plants with RECS, into the same pool with those without RECs. It would seem logical that 'if' BPA places VERs last on the list to be curtailed, BPA would comingle these plants to the list of Environmental resources who are last to be dispatched.

Ramping LLH to HLH – Would DERB Penalties Apply
(Has yet to be addressed in current ER BP)

Is it BPA's intent to charge DERBS energy rates for ramping situations where the metered vs. scheduled energy is outside the to-be-determined DERBS dead band? BPA needs to make sure the language in the ER BP and the final DERBS rate are consistent.

Generation Imbalance and Energy Imbalance
(Has yet to be addressed in current ER BP)

The current draft ER BP already discusses Generation Imbalance, but EWEB asks that BPA clarify as to how Energy Imbalance (EI) will work with ER.

BPA Should Exclude Loss Returns from Energy Replacement Schedules
(Has yet to be addressed in current ER BP)

If BPA TBL could exclude these from customer loss calculations that might be a good fix with minimal economic impact. Replacement energy loss schedules would be occurring primarily during LLH's and the calculation for losses at 1.9% of market 168 hours later would yield a value near $0 until that final week as we exit the extreme over-generation period and enter a period where prices rise above $0. This might be a simple fix for this first year.

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EWEB's Suggested Priority for Environmental Redispatch

EWEB has reviewed many of the previous customer comments and has been an active participant on the ER conference calls. Positions are fairly polarized. Bookends are that there are those that feel strongly that BPA's ER BP is fraught with serious legal, contractual and operational infirmities, that BPA has failed to demonstrate ER is necessary to comply with reliability, fish and wildlife, or other statutory obligations, and there are those on the other side of the room who firmly believe it is about all those things. If nothing else, it will be refreshing to see where this all lands.

EWEB, while not a BA, operates in that fashion. We integrate and schedule wind, biomass, co-generation, peaking hydro, run of river hydro, and have a small share of Mid Columbia generation. EWEB uses its 100MW peaking Carmen Hydro plant's AGC capability to meet our planned net load obligation on BPA each scheduling hour, both on a 4-second, within hour, and end-of-hour manner. EWEB manages reservoirs under FERC licenses and must adhere to strict river and reservoir limits fluctuations every day under varying and at times challenging conditions. The influx of VER has been and will be primarily to fulfill RPS obligations outside of BPA's BA, with most going to California at this time. Most parties in favor of the current draft ER BPA either share a similar operational experience or rely on BPA to manage their system and keep rates as low as possible.

BPA seeks feedback on methods to allocate ER reductions in a manner that will result in the least cost to generators. So, under this clear direction, it's sort of a foregone conclusion that the last to go would be VERs with both PTCs and RECs.

So, once BPA has established generating levels are based on spill that runs up against BiOp spill limits, EWEB sees the following strategy as fair and equitable: Note: Excluded from the list include (1) Co-generation facilities where load and generation are correlated, and (2) thermals located in areas where reducing generation would have a negative impact on transmission capability.

1. First, ask that non-federal thermals without RECs run at minimum generating levels.

2. Second, EWEB suggest that BPA uses a pre-prioritized list of hydro projects to allocate spill to hydro plants. In EWEB's case, will have already backed down hydro generation to zero or minimums once we have covered our load/resource balance for the hour. Using a pre-determined list following discussion with its customers would facilitate faster reaction time. In EWEB's case it would be a discussion about can we start to spill, can we increase spill, or can we reduce generation and still adhere to our FERC river and reservoir license requirements. The conversation could also take in protection of endangered species, water quality, electric system integrity, reliability, and safety.

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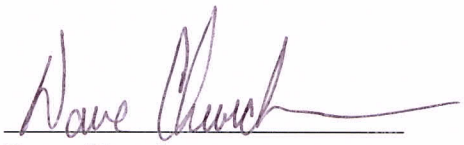
3. Third, if these reductions from thermals without RECs and available hydro facilities are insufficient to meet its needs, BPA would allocate pro-rata to all VERs and thermal plants with RECs their share of the remaining reduction, with each wind farm allocating their pro rata share in the same fashion across all purchasers of such wind farm.

4. If these reductions are still insufficient BPA would allocate pro-rata across all VERs with both PTCs and RECs the remaining required reduction, again with that customer assigning curtailment pro-rata between the purchases from the wind farm.

Respectfully submitted



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